Gastroenteritis

Gastroenteritis is the inflammation of the mucosa lining the stomach and small intestine. Bacteria, viruses, and food intolerances may trigger gastroenteritis and lead to symptoms of abdominal distress including sudden diarrhea, nausea, vomiting, and abdominal cramping. Gastroenteritis caused by bacteria may cause bloody stool, while viral causes may present with flu-like symptoms including fever, fatigue, headache, and muscle pain. Although the disease is self-limiting with symptoms resolving within one week, oral rehydration or IV fluid replacement is necessary if dehydration occurs. Prevention techniques, such as hand washing and rotavirus vaccination, are critical in minimizing the spread of gastroenteritis.

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Cause/Mechanism

Viruses
Viruses

Viruses are the leading cause of gastroenteritis. Norovirus is the common cause in adults while rotavirus is the leading cause of gastroenteritis in children. Sources of virus transmission include eating contaminated food and touching tainted surfaces.

Bacteria
Bacteria-guy

Bacterial causes of gastroenteritis include Campylobacter jejuni, E. coli, and Salmonella. Toxins released by certain bacteria such as C. difficile may also trigger cases of gastroenteritis.

Food Intolerances
Food Intolerance

Food intolerances may cause inflammation of the mucosal lining in the stomach and small intestine. Examples include individuals with Crohn's disease, people with lactose intolerance consuming dairy products, and people with Celiac disease eating gluten.

Assessment

Flu-Like Symptoms
Thermometer and Ice-bag

Gastroenteritis may present with flu-like symptoms, such as fever, fatigue, headache, and muscle pain. Flu-like symptoms are commonly associated with some viral causes of infectious gastroenteritis.

GI Distress
GI with Flare-gun

Symptoms of acute GI distress manifest in patients with gastroenteritis. The patient may present with sudden diarrhea, nausea, vomiting, and abdominal cramping. Since frequent diarrhea and vomiting may quickly dehydrate the patient, monitoring hydration status is important for prompt intervention.

Bloody Stool
Bloody Stool

Bacterial causes of gastroenteritis may cause the patient to have bloody stools. Contact the patient's healthcare provider if bloody stools occur.

Interventions

Oral Rehydration
Mouth Water-bottle

Although most cases of gastroenteritis are self-limiting, dehydration is a major risk factor. Since electrolytes and fluid are lost through diarrhea and vomit, encourage the patient to drink fluids containing glucose and electrolytes as tolerated. Since older adults and chronically ill patients may be unable to orally consume adequate amounts of fluid to compensate for fluid loss, IV fluid replacement may be administered as needed.

Considerations

Self-Limiting
Self-closing

Most cases of gastroenteritis are self-limiting, meaning that it usually resolves itself within 1 week after the onset of symptoms. Nursing management is similar to that of a patient with acute diarrhea. However, individuals such as older adults and chronically ill patients are at high risk of dehydration. Medications that suppress intestinal motility (loperamide [Imodium]) should not be given as they prevent the elimination of the infecting organism unless the health care provider determines that antiperistaltic agents are needed.

Prevention
Prevention-wall

Preventative measures are critical in minimizing the risk of developing gastroenteritis. Frequent hand washing with soap and drinking clean water are techniques to help avoid contacting and spreading infectious gastroenteritis. The rotavirus vaccine is recommended in children to help decrease the risk of contracting the virus.